WHAT IS CLAIMED IS:

1.   A method comprising the steps of:

storing a first set of display data in a first portion of a frame buffer, wherein the first set of display data is associated with a first virtual display;

storing a second set of display data in a second portion of the frame buffer, wherein the second set of display data is associated with a second virtual display;

selecting one of the first virtual display or the second virtual display to be presented by a display device;

when the first virtual display is selected, providing data from the first portion of the frame buffer to a display controller for presentation on the display device; and

when the second virtual display is selected, providing data from the second portion of the frame buffer to the display controller for presentation on the display device.

2.   The method as in Claim 1, further including the steps of:

partitioning, before the step of storing the first set of display data, the frame buffer into the first portion and the second portion to match a number of virtual displays to be supported; and

assigning the first virtual display to the first portion and the second virtual display to the second portion.

3.   The method as in Claim 1, wherein the frame buffer is associated with video hardware connected to the display device.

4   The method as in Claim 1, wherein the step of selecting one of the first virtual display or the second virtual display includes identifying an event trigger.

1   5.   The method as in Claim 4, wherein the event trigger includes identifying a particular hot-

2   key from a plurality of hot-keys, wherein the plurality of hot-keys include a first hot-key

3   assigned to the first virtual display and a second hot-key assigned to the second virtual

4   display.

1   6.   The method as in Claim 4, wherein the event trigger includes a mouse position.

1   7.   The method as in Claim 4, wherein the event trigger includes activity associated with an

2   application on one of the first virtual display or the second virtual display.

1   8.   The method as in Claim 1, wherein a system desktop is expanded over the first and

2   second virtual displays.

1   9.   A method comprising the steps of:

2   determining a number of virtual displays in a plurality of virtual displays to be supported;

3   partitioning a frame buffer into a plurality of frame buffer portions, wherein the plurality

4   of frame buffer portions include a first frame buffer portion associated with a first

5   virtual display of the plurality of virtual displays and a second frame buffer

6   portion associated with a second virtual display of the plurality of virtual displays;

7   reporting the number of virtual displays as a number of display devices;

8   providing a first address associated with the first frame buffer portion, wherein the first

9   address is reported as an address of a first frame buffer associated with a first

10   display device; and

11   providing a second address associated with the second frame buffer portion, wherein the

12   second address is reported as an address of a second frame buffer associated with

13   a second display device.

1   10.   The method as in Claim 9, further including the steps of:

2   selecting one of the first virtual display or the second virtual display;

3   when the first virtual display is selected, providing data associated with the first frame

4   buffer portion; and

5   when the second virtual display is selected, providing data associated with the second

6   frame buffer portion.

1   11.   The method as in Claim 10, wherein the step of selecting one of the first virtual display or

2   the second virtual display includes identifying a trigger event.

1   12.   The method as in Claim 11, wherein the event trigger includes identifying a particular

2   hot-key from a plurality of hot-keys, wherein the plurality of hot-keys include a first hot-

3   key assigned to the first virtual display and a second hot-key assigned to the second

4   virtual display.

1　13. The method as in Claim 11, wherein the event trigger includes a mouse position.

1　14. The method as in Claim 11, wherein the event trigger includes an activity associated with
2　　　an application displayed on one of the first virtual display or the second virtual display.

1　15. The method as in Claim 9, wherein the step of partitioning the frame buffer includes
2　　　determining a space to assign to a portion of the frame buffer dependent on parameters of
3　　　an associated virtual display.

1　16. The method as in Claim 15, wherein the parameters include a resolution assigned to each
2　　　virtual display.

1　17. The method as in Claim 15, wherein the parameters include a color depth assigned to
2　　　each of the virtual displays.

1　18. The method as in Claim 9, wherein the number of display devices to be supported is
2　　　based on an available size of the frame buffer.

1　19. The method as in Claim 9, wherein the number of display devices to be supported is
2　　　based on virtual display parameters.

1　20. The method as in Claim 19, wherein the parameters include a resolution assigned to each
2　　　virtual display.

1　21. The method as in Claim 19, wherein the parameters include the color depth assigned to
2　　　each of the virtual displays.

1   22.   The method as in Claim 9, wherein reporting the number of virtual displays includes

2   providing the number of virtual displays to an operating system as the number of display

3   devices in a multiple display configuration.

1 23. A system comprising:

2 a data processor having an input/output buffer;

3 memory having an input/output buffer coupled to the input/output buffer of the data

4 processor, said memory having a program of instructions including:

5 a display driver to:

6 report a multiple display configuration, wherein said multiple display

7 configuration includes support for a plurality of virtual displays;

8 partition a frame buffer into a plurality of frame buffer portions;

9 assign a different virtual display of the plurality of virtual displays to each

10 of the frame buffer portions of the plurality of frame buffer

11 portions;

12 a video controller coupled to the input/output buffer of the data processor, said video

13 controller having:

14 a frame buffer having the plurality of frame buffer portions, wherein each frame

15 buffer portion of the plurality of frame buffer portions is to store display

16 data associated with an assigned virtual display of the plurality of virtual

17 displays; and

18 a display controller to provide display data from a frame buffer portion of the

19 plurality of frame buffer portions to a display device.

1 24. The system as in Claim 23, wherein said display driver further to select a virtual display

2 from the plurality of virtual displays for presentation and said display data provided by

3 said display controller is associated with the selected virtual display.

1 25. The system as in Claim 24, wherein said display driver selects from the plurality of

2 virtual displays dependent on an event trigger.

22

1 26. The system as in Claim 25, wherein the event trigger includes identifying a particular hot-

2   key from a plurality of hot-keys, wherein the plurality of hot-keys include a first hot-key

3   assigned to a first virtual display of the plurality of virtual displays and a second hot-key

4   assigned to a second virtual display of the plurality of virtual displays.

1 27. The system as in Claim 25, wherein the event trigger includes a mouse position.

1 28. The system as in Claim 25, wherein the event trigger includes an activity associated with

2   an application displayed on one of the virtual displays of the plurality of virtual displays.

1 29. The system as in Claim 23, wherein said display driver reports said multiple display

2   configuration to an operating system.

1   30.   A computer readable medium tangibly embodying a program of instructions, said

2   program of instructions including instructions to:

3   determine a number of virtual displays in a plurality of virtual displays to be supported;

4   partition a frame buffer into a plurality of frame buffer portions, wherein the plurality of

5   frame buffer portions include a first frame buffer portion associated with a first

6   virtual display of the plurality of virtual displays and a second frame buffer

7   portion associated with a second virtual display of the plurality of virtual displays;

8   report the number of virtual displays as a number of display devices in a multiple display

9   configuration;

10   provide a first address associated with the first frame buffer portion, wherein the first

11   address is reported as an address of a first frame buffer associated with a first

12   display device of the multiple display configuration; and

13   provide a second address associated with the second frame buffer portion, wherein the

14   second address is reported as an address of a second frame buffer associated with

15   a second display device of the multiple display configuration.

1   31.   The computer readable medium as in Claim 30, further including instructions to:

2   select one of the first virtual display or the second virtual display;

3   provide data associated with the first frame buffer portion when the first virtual display is

4   selected; and

5   provide data associated with the second frame buffer portion when the second virtual

6   display is selected.

1   32.   The computer readable medium as in Claim 31, wherein a trigger event is used to select

2   one of the first virtual display or the second virtual display.

1   33.   The computer readable medium as in Claim 32, wherein the event trigger includes

2   identifying a particular hot-key from a plurality of hot-keys, wherein the plurality of hot-

3   keys include a first hot-key assigned to the first virtual display and a second hot-key

4   assigned to the second virtual display.

1   34.   The computer readable medium as in Claim 32, wherein the event trigger includes a
2   mouse position.

1   35.   The computer readable medium as in Claim 32, wherein the event trigger includes an
2   activity associated with an application displayed on one of the first virtual display or the
3   second virtual display.

1   36.   The computer readable medium as in Claim 30, wherein the instructions to partition the
2   frame buffer includes determining a space to assign to a portion of the frame buffer
3   dependent on parameters of an associated virtual display.

1   37.   The computer readable medium as in Claim 36, wherein the parameters include a
2   resolution assigned to each virtual display.

1   38.   The computer readable medium as in Claim 36, wherein the parameters include a color
2   depth assigned to each of the virtual displays.

1   39.   The computer readable medium as in Claim 30, wherein the number of display devices to
2   be supported is based on an available size of the frame buffer.

1   40.   The computer readable medium as in Claim 30, wherein the number of display devices to
2   be supported is based on virtual display parameters.

1   41.   The computer readable medium as in Claim 40, wherein the parameters include a
2   resolution assigned to each virtual display.

25

1   42.   The computer readable medium as in Claim 30, wherein the instructions to report the

2   number of virtual displays includes reporting the multiple display configuration to an

3   operating system.